

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/001,039ADATE: 08/06/98  
TIME: 12:40:51

INPUT SET: S27916.raw

This Raw Listing contains the General  
Information Section and up to the first 5 pages.

## SEQUENCE LISTING

ENTERED

1  
2  
3 (1) General Information:  
4  
5 (i) APPLICANT: Chiron Corporation  
6  
7 (ii) TITLE OF INVENTION: Methods for Administration of  
8 Recombinant Gene Delivery Vehicles for Treatment of Hemophilia  
9 and Other Disorders  
10  
11 (iii) NUMBER OF SEQUENCES: 83  
12  
13 (iv) CORRESPONDENCE ADDRESS:  
14 (A) ADDRESSEE: Chiron Corporation  
15 (B) STREET: 4560 Horton Street  
16 (C) CITY: Emeryville  
17 (D) STATE: California  
18 (E) COUNTRY: U.S.A.  
19 (F) ZIP: 94608  
20  
21 (v) COMPUTER READABLE FORM:  
22 (A) MEDIUM TYPE: Floppy disk  
23 (B) COMPUTER: IBM PC compatible  
24 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
25 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30  
26  
27 (vi) CURRENT APPLICATION DATA:  
28 (A) APPLICATION NUMBER:  
29 (B) FILING DATE:  
30 (C) CLASSIFICATION:  
31  
32 (viii) ATTORNEY/AGENT INFORMATION:  
33 (A) NAME: Kruse, Norman J.  
34 (B) REGISTRATION NUMBER: 35,235  
35 (C) REFERENCE/DOCKET NUMBER: 1155.005  
36  
37 (ix) TELECOMMUNICATION INFORMATION:  
38 (A) TELEPHONE: (510) 923-3520  
39 (B) TELEFAX: (510) 655-3542  
40  
41  
42  
43 (2) INFORMATION FOR SEQ ID NO:1:  
44 (i) SEQUENCE CHARACTERISTICS:  
45 (A) LENGTH: 24 base pairs  
46 (B) TYPE: nucleic acid

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47 (C) STRANDEDNESS: single  
48 (D) TOPOLOGY: linear  
49 (ii) MOLECULE TYPE: DNA (genomic)  
50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:  
51 GAGAGATGGG GGAGGCTAAC TGAG 24  
52  
53 (2) INFORMATION FOR SEQ ID NO:2:  
54 (i) SEQUENCE CHARACTERISTICS:  
55 (A) LENGTH: 28 base pairs  
56 (B) TYPE: nucleic acid  
57 (C) STRANDEDNESS: single  
58 (D) TOPOLOGY: linear  
59 (ii) MOLECULE TYPE: DNA (genomic)  
60 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:  
61 GATCCTCAGT TAGCCTCCCC CATCTCTC 28  
62  
63 (2) INFORMATION FOR SEQ ID NO:3:  
64 (i) SEQUENCE CHARACTERISTICS:  
65 (A) LENGTH: 35 base pairs  
66 (B) TYPE: nucleic acid  
67 (C) STRANDEDNESS: single  
68 (D) TOPOLOGY: linear  
69 (ii) MOLECULE TYPE: DNA (genomic)  
70 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:  
71 TATATCTCCA GATGAGGTAC ATGATTTTAG GCTTG 35  
72  
73 (2) INFORMATION FOR SEQ ID NO:4:  
74 (i) SEQUENCE CHARACTERISTICS:  
75 (A) LENGTH: 40 base pairs  
76 (B) TYPE: nucleic acid  
77 (C) STRANDEDNESS: single  
78 (D) TOPOLOGY: linear  
79 (ii) MOLECULE TYPE: DNA (genomic)  
80 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:  
81 TATATATCGA TTCAAGGCAT TTTCTTTTCA TCAATAAAAC 40  
82  
83 (2) INFORMATION FOR SEQ ID NO:5:  
84 (i) SEQUENCE CHARACTERISTICS:  
85 (A) LENGTH: 37 base pairs  
86 (B) TYPE: nucleic acid  
87 (C) STRANDEDNESS: single  
88 (D) TOPOLOGY: linear  
89 (ii) MOLECULE TYPE: DNA (genomic)  
90 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:  
91 TCGAGGATCC GCCCGGGCGG CCGCATCGAT GTCGACG 37  
92  
93 (2) INFORMATION FOR SEQ ID NO:6:  
94 (i) SEQUENCE CHARACTERISTICS:  
95 (A) LENGTH: 35 base pairs  
96 (B) TYPE: nucleic acid  
97 (C) STRANDEDNESS: single  
98 (D) TOPOLOGY: linear  
99 (ii) MOLECULE TYPE: DNA (genomic)

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100 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:  
101 CGCGTCGACA TCGATGCGGC CGCCCGGGCG GATCC 35  
102  
103  
104 (2) INFORMATION FOR SEQ ID NO:7:  
105 (i) SEQUENCE CHARACTERISTICS:  
106 (A) LENGTH: 77 base pairs  
107 (B) TYPE: nucleic acid  
108 (C) STRANDEDNESS: single  
109 (D) TOPOLOGY: linear  
110 (ii) MOLECULE TYPE: DNA (genomic)  
111 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:  
112 AGTGAATTTCG AGCTCGGTAC CCGGGGATCC TCTAGAGTCG ACCTGCAGGC ATGCAAGCTT 60  
113 GCGCTAATCA TGGTCAT 77  
114  
115 (2) INFORMATION FOR SEQ ID NO:8:  
116 (i) SEQUENCE CHARACTERISTICS:  
117 (A) LENGTH: 8 amino acids  
118 (B) TYPE: amino acid  
119 (C) STRANDEDNESS: single  
120 (D) TOPOLOGY: linear  
121 (ii) MOLECULE TYPE: protein  
122 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:  
123 Ala Arg Glu Met Gly Glu Ala Asn  
124 1 5  
125  
126 (2) INFORMATION FOR SEQ ID NO:9:  
127 (i) SEQUENCE CHARACTERISTICS:  
128 (A) LENGTH: 27 base pairs  
129 (B) TYPE: nucleic acid  
130 (C) STRANDEDNESS: single  
131 (D) TOPOLOGY: linear  
132 (ii) MOLECULE TYPE: DNA (genomic)  
133 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:  
134 CCCGAGAGAT GGGGGAGGCT AACTGAG 27  
135  
136 (2) INFORMATION FOR SEQ ID NO:10:  
137 (i) SEQUENCE CHARACTERISTICS:  
138 (A) LENGTH: 31 base pairs  
139 (B) TYPE: nucleic acid  
140 (C) STRANDEDNESS: single  
141 (D) TOPOLOGY: linear  
142 (ii) MOLECULE TYPE: DNA (genomic)  
143 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:  
144 GGGCTCTCTA CCCCCTCCGA TTGACACCTA G 31  
145  
146 (2) INFORMATION FOR SEQ ID NO:11:  
147 (i) SEQUENCE CHARACTERISTICS:  
148 (A) LENGTH: 5 amino acids  
149 (B) TYPE: amino acid  
150 (C) STRANDEDNESS: single  
151 (D) TOPOLOGY: linear  
152 (ii) MOLECULE TYPE: protein

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/001,039ADATE: 08/06/98  
TIME: 12:40:54

INPUT SET: S27916.raw

153 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:  
154 Thr Ile Met Thr Met  
155 1 5  
156  
157  
158 (2) INFORMATION FOR SEQ ID NO:12:  
159 (i) SEQUENCE CHARACTERISTICS:  
160 (A) LENGTH: 24 base pairs  
161 (B) TYPE: nucleic acid  
162 (C) STRANDEDNESS: single  
163 (D) TOPOLOGY: linear  
164 (ii) MOLECULE TYPE: DNA (genomic)  
165 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:  
166 CCCTGTGCCT TATTTGAACT AACC 24  
167  
168 (2) INFORMATION FOR SEQ ID NO:13:  
169 (i) SEQUENCE CHARACTERISTICS:  
170 (A) LENGTH: 24 base pairs  
171 (B) TYPE: nucleic acid  
172 (C) STRANDEDNESS: single  
173 (D) TOPOLOGY: linear  
174 (ii) MOLECULE TYPE: DNA (genomic)  
175 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:  
176 CCCACCACAA CCACATATCC CTCC 24  
177  
178 (2) INFORMATION FOR SEQ ID NO:14:  
179 (i) SEQUENCE CHARACTERISTICS:  
180 (A) LENGTH: 19 base pairs  
181 (B) TYPE: nucleic acid  
182 (C) STRANDEDNESS: single  
183 (D) TOPOLOGY: linear  
184 (ii) MOLECULE TYPE: DNA (genomic)  
185 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:  
186 CCAGTCCTCC GATTGACTG 19  
187  
188 (2) INFORMATION FOR SEQ ID NO:15:  
189 (i) SEQUENCE CHARACTERISTICS:  
190 (A) LENGTH: 8332 base pairs  
191 (B) TYPE: nucleic acid  
192 (C) STRANDEDNESS: single  
193 (D) TOPOLOGY: linear  
194 (ii) MOLECULE TYPE: DNA (genomic)  
195 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:  
196  
197 GCGCCAGTCC TCCGATTGAC TGAGTCGCCC GGGTACCCGT GTATCCAATA AACCCCTCTTG 60  
198  
199 CAGTTGCATC CGACTTGTGG TCTCGCTGTT CCTTGGGAGG GTCTCCTCTG AGTGATTGAC 120  
200  
201 TACCCGTCAG CGGGGGTCTT TCATTTGGGG GCTCGTCCGG GATCGGGAGA CCCCTGCCCA 180  
202  
203 GGGACCACCG ACCCACCACC GGGAGGTAAG CTGGCCAGCA ACTTATCTGT GTCTGTCCGA 240  
204  
205 TTGTCTAGTG TCTATGACTG ATTTTATGCG CCTGCGTCGG TACTAGTTAG CTAAC TAGCT 300

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206							
207	CTGTATCTGG	CGGACCCGTG	GTGGAAC TGA	CGAGTTCGGA	ACACCCGGCC	GCAACCCTGG	360
208							
209	GAGACGTCCC	AGGGACTTCC	GGGGCCGTTT	TTGTGGCCCG	ACCTGAGTCC	AAAAATCCCG	420
210							
211	ATCGTTTTGG	ACTCTTTGGT	GCACCCCCCT	TAGAGGAGGG	ATATGTGGTT	CTGGTAGGAG	480
212							
213	ACGAGAACCT	AAAACAGTTC	CCGCCTCCGT	CTGAATTTTT	GCTTTCGGTT	TGGGACCGAA	540
214							
215	GCCGCGCCGC	GCGTCTTGTC	TGCTGCAGCA	TCGTTCCTGTG	TTGTCTCTGT	CTGACTGTGT	600
216							
217	TTCTGTATTT	GTCTGAGAAT	ATGGGCCAGA	CTGTTACCAC	TCCCTTAAGT	TTGACCTTAG	660
218							
219	GTCACTGGAA	AGATGTGCGAG	CGGATCGCTC	ACAACCAGTC	GGTAGATGTC	AAGAAGAGAC	720
220							
221	GTTGGGT TAC	CTTCTGCTCT	GCAGAA TGGC	CAACCTTTAA	CGTCGGATGG	CCGCGAGACG	780
222							
223	GCACCTTTAA	CCGAGACCTC	ATCACC CAGG	TTAAGATCAA	GGTCTTTTCA	CCTGGCCCCG	840
224							
225	ATGGACACCC	AGACCAGGTC	CCCTACATCG	TGACCTGGGA	AGCCTTGGCT	TTTGACCCCC	900
226							
227	CTCCCTGGGT	CAAGCCCTTT	GTACACCCTA	AGCCTCCGCC	TCCTCTTCCT	CCATCCGCCC	960
228							
229	CGTCTCTCCC	CCTTGAACCT	CCTCGTTCGA	CCCCGCCTCG	ATCCTCCCTT	TATCCAGCCC	1020
230							
231	TCACTCCTTC	TCTAGGCGCC	AAACCTAAAC	CTCAAGTTCT	TTCTGACAGT	GGGGGGCCGC	1080
232							
233	TCATCGACCT	ACTTACAGAA	GACCCCCCGC	CTTATAGGGA	CCCAAGACCA	CCCCCTTCCG	1140
234							
235	ACAGGGACGG	AAATGGTGGA	GAAGCGACCC	CTGCGGGAGA	GGCACC GGAC	CCCTCCCCAA	1200
236							
237	TGGCATCTCG	CCTACGTGGG	AGACGGGAGC	CCCCGTGTGGC	CGACTCCACT	ACCTCGCAGG	1260
238							
239	CATTCCCCCT	CCGCGCAGGA	GGAAACGGAC	AGCTTCAATA	CTGGCCGTTC	TCCTCTTCTG	1320
240							
241	ACCTTTACAA	CTGGAAAAAT	AATAACCCTT	CTTTTTCTGA	AGATCCAGGT	AAACTGACAG	1380
242							
243	CTCTGATCGA	GTCTGTTCTC	ATCACC CATC	AGCCACCTG	GGACGACTGT	CAGCAGCTGT	1440
244							
245	TGGGGACTCT	GCTGACCGGA	GAAGAAAAAC	AACGGGTGCT	CTTAGAGGCT	AGAAAGGCGG	1500
246							
247	TGCGGGGCGA	TGATGGGCGC	CCCACTCAAC	TGCCCAATGA	AGTCGATGCC	GCTTTTCCCC	1560
248							
249	TCGAGCGCCC	AGACTGGGAT	TACACCACCC	AGGCAGGTAG	GAACCACCTA	GTCCACTATC	1620
250							
251	GCCAGTTGCT	CCTAGCGGGT	CTCCAAAACG	CGGGCAGAAG	CCCCACCAAT	TTGGCCAAGG	1680
252							
253	TAAAAGGAAT	AACACAAGGG	CCCAATGAGT	CTCCCTCGGC	CTTCCTAGAG	AGACTTAAGG	1740
254							
255	AAGCCTATCG	CAGGTACACT	CCTTATGACC	CTGAGGACCC	AGGGCAAGAA	ACTAATGTGT	1800
256							
257	CTATGTCTTT	CATTTGGCAG	TCTGCCCCAG	ACATTGGGAG	AAAGTTAGAG	AGGTTAGAAG	1860
258							

**SEQUENCE VERIFICATION REPORT**  
**PATENT APPLICATION US/09/001,039A**

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TIME: 12:40:55

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